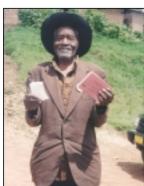
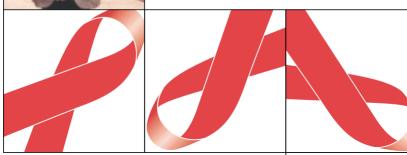
# Paying for HIV/AIDS services



Lessons from National Health Accounts and community-based health insurance in Rwanda, 1998-1999



UNAIDS Case Study



#### by

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Cover photo: A patient proudly displays his insurance membership card after visiting the Mulindi health centre in Byumba. Photo by Phara Georges.

Photos: Pia Schneider, MA

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# Acknowledgements

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The household survey was conducted in four health facilities with HIV-positive individuals who were informed about their health status (Central Hospital of Kigali, the Bilyogo health centre in Kigali, a consultation centre in Kigali (CRIS), and at the AIDS association in Butare). Interviews were conducted by facility-based social assistants who were acquainted with the patients and had a personal relationship with them.

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population living in the three districts Byumba, Kabgayi, and Kabutare, have also made prepayment schemes possible.

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## Summary

R wanda ranks among the poorest countries in the world with about 70% of its 7.8 million inhabitants living below the poverty line, and a HIV prevalence of at least 11% (1998). During the period of humanitarian assistance that followed the genocide of 1994. public health care services were provided free to patients. financed by donors and the government. In 1996, the Ministry of Health re-introduced pre-war-level user fees in health centres and hospitals. By 1999, the utilization of primary health care services had dropped from 0.3 annual consultations per capita in 1997 to a national average of 0.25. This sharp drop in demand for health services, combined with growing concerns about rising poverty, poor health outcome indicators, and a worrisome HIV prevalence among all population groups, motivated the Rwandan Government to investigate health care spending through National Health Accounts, and develop community-based health insurance to ensure that the poor had access to the modern health care system.

This report focuses on the financial side of HIV/AIDS, with the first chapter examining how much and what proportion of overall health expenditures by government, donors and patients go towards the prevention and treatment of HIV/AIDS. The second chapter suggests a way to decrease the financial burden of HIV on the rural poor infected with the virus, through community-based health insurance such as prepayment schemes. The information reported is from two initiatives undertaken by the Ministry of Health in Rwanda (MOH), the Rwandan National Health Accounts (NHA) analysis, and a pilot programme of prepayment schemes in the three Rwandan districts of Byumba, Kabgayi

and Kabutare. Technical and financial assistance was provided by Partnerships for Health Reform (PHR), funded by the United States Agency for International Development (USAID) and administered by Abt Associates.

Findings from National Health Accounts revealed that an estimated one-tenth of overall health expenditure goes towards the prevention of AIDS and the treatment of its symptoms. Of total HIV/AIDS-specific health expenditure, more than 90% was paid through out-of-pocket payments by seropositive patients. Government and donors play a negligible role when it comes to paying treatment costs; this highlights the heavy financial burden placed on the 400 000 HIV-infected individuals in Rwanda, of whom more than three-quarters struggle daily to pay for food and medicine to alleviate their symptoms.

The pilot programme of prepayment schemes has, since 1999, allowed individuals to insure themselves against unexpected health care costs. Membership entitles the enrolled rural poor to a benefit package that covers drugs, all curative and preventive care in health centres, and transfer by ambulance to the district hospital, where a limited benefit package is covered. A first-year evaluation of the programme has shown that the 88 300 members report considerably better access to basic curative, preventive and obstetrics services compared with non-members, and that they view the prepayment plan as less expensive than outof-pocket payments. Though at least 11% of the Rwandan adult population are estimated to be infected with the virus. HIV prevalence among prepayment members is likely to be higher, as the chronically sick are more likely to seek insurance for health care costs. Church groups have used prepayment to pay enrolment fees for indigent and seropositive individuals, who remain anonymous and thus cannot be

stigmatized. This targeted financial support could be a promising way for governments and donors to subsidize high-cost patients' demand for basic health care services.

#### **HIV** in Rwanda

With at least one out of ten adults infected with the HIV virus and the majority (70%) of inhabitants living below poverty level in 1998, Rwanda faces an acute challenge from the HIV/AIDS pandemic. As a result of the political turmoil and population movements of the mid-1990s, the gap between HIV prevalence rates in urban and rural areas has closed, revealing increased prevalence rates throughout the country. Women are particularly at risk, with more than one-quarter of all pregnant women testing positive for HIV in 1996, and young people; children (comprising over half of the Rwandan population) are also vulnerable, with one out of ten infected in 1997.

The Government of Rwanda struggles with the pervasive constraints of limited resources and high levels of foreign debt. With a per capita GDP of US\$250 in 1999 and US\$1.4 billion in debt by the end of 1998 (over 70% of total GDP), the government must make careful resource allocation decisions. Various government responsibilities compete for funds: the government spent almost US\$7 per capita on debt service, and just over US\$1 per capita on health in 1998, relying heavily on international organizations and private households to pay for health services. Donors pay for half of the costs of the health care system, while public funds cover only a tenth of total health care costs; this leaves 40% to be covered by households' out-of-pocket payments.

Rwanda indicated its commitment to combat the HIV/AIDS pandemic as early as 1986. An educational campaign was launched at that time, and two Medium-Term Plans have been implemented, along with a multisectoral strategic plan for HIV prevention through the year 2001. The National AIDS Programme focuses its efforts on coordination, monitoring and evaluation of HIV prevention, resource mobilization and surveillance, while regional health departments implement prevention activities. Unfortunately, these efforts are challenged by a lack of testing and counselling: community studies have revealed that AIDS is still somewhat stigmatized, people lack the money to pay for tests, tests are not available in health centres or in most district hospitals, testing is infrequent in tertiary hospitals (Central Hospital in Kigali and Hôpital Universitaire Butare), and test results are often not revealed to patients.

# Chapter 1

Who pays for which HIV-related services?

# The National Health Accounts analysis in Rwanda

#### Introduction

In the autumn of 1999, the United States Agency for International Development (USAID)-funded Partnerships for Health Reform (PHR) project, in collaboration with the Ministry of Health (MOH) and the World Health Organization (WHO), collected data on the sources and uses of funding for HIV/AIDS services in Rwanda using the National Health Accounts (NHA) framework.

The NHA study itself was conducted in 1998, therefore the time period of this study spans 1998–1999. Analysis of National Health Accounts is a method of tracking resource flows across a health system, and it helps determine who pays how much for various health services.

Information gathered through the NHA analysis is critical to policy-makers who seek to identify health system problems and opportunities for improvement, to develop and select the best resource allocation strategy, and to monitor policy impact and adjust policies. PHR and its counterparts conducted this analysis with four main objectives in mind:

- 1. to apply NHA as a tool for evaluating the resource flow in the Rwandan health system;
- 2. to document the magnitude of sources, flow and uses of funds within the public and private health care sector in Rwanda;
- 3. to identify the magnitude of health sources and uses, as well as the flow of health funds related to HIV/AIDS in Rwanda; and
- to suggest policy interventions for the overall Rwandan health sector and for the subsector of HIV/AIDS to improve access to, and affordability of, health care.

With the success of the study, it was expected that the NHA methodology could be replicated in the future to help policy-makers adjust policy strategies and make informed resource allocation decisions for the funding of HIV-related services.

### Methodology

As the NHA framework strives to show public, private and out-of-pocket health expenditure, surveys were designed and implemented to collect primary health care financing data from government entities, financing agents, hospitals, pharmaceutical companies, private physicians, NGOs and health facilities. Survey data on NGOs, physicians and donors were supplemented with additional secondary data on expenditures from other sources. In addition, a house-hold survey was conducted to estimate the use of, and expenditure on, outpatient health care by a sample of HIV-positive individuals. Household expenditure was used as a proxy for income so that findings could be used to assess impacts according to economic groups. Survey findings provide a snapshot of the utilization of health services by

seropositive individuals—where they go for care, and how the cost of care is financed. As only a few health facilities provide HIV testing and identify their seropositive patients, the household survey results have a selection bias. First, the 350 study participants had already been tested and were aware of their HIV status and, second, most individuals were tested because they thought they were infected, or were already experiencing symptoms of HIV, rather than finding out their status during the course of testing.

### **HIV** financing

An estimated total of US\$10 million flowed into the health sector specifically to pay for HIV/AIDS-related services or activities. Total health expenditure in 1998 is estimated at US\$100 million, with 10% going towards HIV. The vast majority of the funds for HIV-almost 80%-was spent on treatment of symptoms and infections caused by the virus in about 400 000 patients. In contrast, 14% of these funds covered antiretroviral treatment for just 202 patients, while 7% went towards prevention activities. These figures reveal the extent to which the treatment of HIV-related illnesses consumes HIV spending, whereas the funds going towards prevention activities are relatively few. The treatment of 202 patients with antiretroviral therapy also exhausts a comparatively large portion of funds. Such disparity in the expenditure for care highlights poorer patients' inaccessibility to HIV/AIDS-related care and the lack of equity in care received.

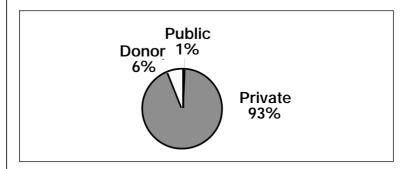
Schneider P et al., Rwanda National Health Accounts 1998. Technical Report No. 53. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc. September 2000. Tables 8 and 44.

Donors pay for almost half of the total health sector budget, but their support to HIV-specific services is comparably lower, comprising only 6% of the financial resources that go towards HIV services and activities (Figure 1). Donors disburse funds directly to national, regional and district facilities, as well as NGOs, mostly for prevention activities. With little support for treatment, donor contribution to total HIV spending appears miniscule in comparison with private spending.

NHA 1998 findings have shown that over 90% of the funds that pay for HIV/AIDS-related services and activities come from private sources, in the form of patients' out-of-pocket payments. The disproportionately high household contribution to HIV/AIDS care demonstrates the economic burden that a family with HIV-positive members must bear. In the absence of coverage for treatment of symptoms and opportunistic infections caused by the virus, a family's access to care and services depends on their ability to pay or to obtain assistance from others. In hospitals, high-income HIV patients receive more extensive radiology, laboratory tests and drugs, whereas poor patients receive minimal treatment. While the average out-of-pocket expenditure for a patient staying at the Central Hospital of Kigali was US\$1400 for high-income patients, according to hospital data, the average price paid by a low-income patient was only US\$47, with the hospital covering whatever poor patients could not pay<sup>2</sup>. Antiretroviral therapy was limited to only 202 wealthy patients, who could afford the high out-of-pocket fees.

<sup>&</sup>lt;sup>2</sup> See Table 44 in NHA 1998 PHR Technical Report No. 53 for out-of-pocket expenditures for different socioeconomic groups.





#### Households with HIV3

The majority of the 350 patients interviewed in Rwanda as part of the NHA household survey were females living in the urban areas of Kigali or Butare, where facilities offering HIV testing are located. More than 80% of these patients were between 26 and 45 years old. Most had finished primary education and lived with two to seven other family members. On average, individuals in the sample had been HIVpositive for almost five years, and 25% of the interviewees said that there was at least one other HIV-positive family member living in their household. As studies have shown that HIV is highly stigmatized and that patients do not often get tested for HIV in Rwanda (Republic of Rwanda, PNLS, 1998), one of the objectives of the household survey was to determine the principal reasons that prompted the individuals to be tested for HIV. The most important reason, listed by over 80% of the individuals, was that they had symptoms or illnesses causing them to suspect that they might have HIV.

<sup>&</sup>lt;sup>3</sup> Information for the following section is from Nandakumar AK et al. (2000), Use of and Expenditures on Outpatient Health Care by a Group of HIV-Positive Individuals in Rwanda. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.

The next most important reason, listed by one-quarter of survey respondents, was that a partner had HIV. Prenatal tests, blood tests, having another HIV-positive patient in the household and other reasons were listed less frequently (less than 10% of the individuals gave such responses).

### Seeking care

Survey results demonstrate relatively high rates of health care utilization, with over half of the individuals having made health-related visits to health facilities in the previous month, and a third reporting more than one visit in the past month. Those living in urban areas visited the health care facilities over ten times more often than those in rural areas, probably reflecting the lack of both geographical and financial accessibility by rural residents. The lowest rates of use were for those who were single or divorced. Not surprisingly, those in the highest income quintile made twice as many visits per capita than those from the lowest income quintile.

### Disparities in spending

Reinforcing the data from hospitals showing higher expenditure on HIV services by those with higher incomes, the household survey revealed that individuals in the highest quintile paid 13 times that spent by individuals in the lowest quintile for outpatient health services. While the average annual per capita health expenditure was USS63 for seropositive patients, urban residents spent more than rural residents, and males spent over twice as much as females. The majority of spending was on medicine—61% on average—with fees, tests, transport and other expenditures comprising a smaller portion of spending.

#### Paying for services

With HIV patients bearing the burden of paying for their own health care, the question of how households pay for these services is extremely important. Only 28% of the households were able to meet the costs of health services from their own resources exclusively, while 72% indicated that they could not finance health care costs on their own. Those households unable to finance themselves resorted to multiple methods of paying for health care, including financial assistance, borrowing or the sale of assets (Table 1).

Table 1. Methods of financing for households unable to self-finance

Category	Percent		
Received assistance	66		
Borrowed	18		
Sold assets	5		
Other	11		

Given the large amount of financial assistance received by HIV patients, the survey sought to determine what sources provided such assistance. Table 2 shows that a major source of assistance was the church, followed by family and friends. "Other private sources" was reported by the largest number of respondents, leaving one to speculate as to what those sources might be, or whether these respondents preferred not to reveal their sources. One-fifth of the patients reported having to borrow to pay for HIV-related health services, and listed friends or neighbours as the main source of those funds, followed by family and others.

Table 2. Source of financial assistance

Category	Percent		
Other private sources	39		
No assistance	28		
Family/friend	12		
Church	16		
Employer	4		
Health insurance	1		
International organization	1		
NGO	0		

Note: As percentages are rounded, the sum total may be greater than 100.

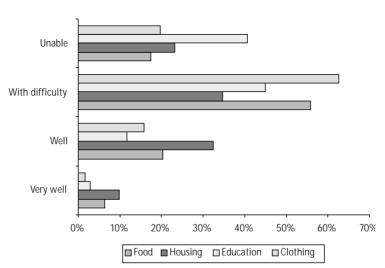
These data point to the essential role played by informal networks of family, friends, neighbours and the community in the financing of HIV-related health services. Social capital has become the support system for 90% of the patients living with HIV who cannot afford health services on their own. Unfortunately, dependence on financial assistance and borrowing can push families into poverty, or into further indebtedness, and some families may not receive the assistance they need within such an informal system.

### The impact of HIV on households

HIV can seriously limit household members' ability to work and earn wages, and therefore impair the ability of households to meet basic needs such as food, housing, education and clothing. Figure 2 reveals that the vast majority of households having family members with HIV (83%) found it difficult, if not impossible, to meet the food needs of the household. The majority found it difficult to meet housing, education and clothing needs as well. These figures demon-

strate that families with HIV-positive members face serious challenges to their well-being.





In addition to the financial burden of out-of-pocket payments for drugs and treatment of HIV-related illnesses, some families face the constraint of income loss due to missed days at work. While two-thirds of the respondents reported that HIV had no impact on their ability to work, over half reported that they had missed at least one day of work in the previous two weeks due to ill-health. On average, the respondents had missed almost five days of work during the two weeks prior to the survey being conducted. In other words, one-third of the time they were too ill to work. These individuals' inability to be a productive member of the household or to provide income for the family during that time was a significant challenge for the majority of households.



Boy delivers firewood on his bike.

#### Not meeting basic needs: Francine's story

Francine\* is a 45-year-old woman from Kigali whose husband died recently. In June of 1990, she began to experience the symptoms of an AIDS-related illness, and went to a health centre suspecting that she might be infected with the HIV virus. Though she has been living with the virus for almost a decade, her health has been a major concern more recently. For about a year, she has found it difficult to lift jugs of water and can no longer carry her young niece or nephew. She has trouble climbing the twisting hill to her makeshift mud house, particularly when she must watch her step following a heavy rain. In the last three months, she has noticed that she has trouble bending down to pick things up, and just walking takes more out of her than it used to. She says her physical and emotional condition is a little bit worse now than it was four weeks ago, and she rates her quality of life during the last several months as pretty bad.

Having completed her primary education, Francine worked for many years on her husband's small farm. However, limited by her health, she has not worked at all for the past three months, and she spends very little money each month. Informally occupying a makeshift home, she does not pay rent, but does spend about US\$2 on utilities each month. She does her best to send her children to school,

<sup>\*</sup> While this is not the individual's real name, she was randomly selected from a subset of the survey sample with average characteristics.

spending about US\$1.40 last year for expenses. She had virtually no money for food in the last month, and had to rely on the generosity of others to feed herself and her children, and has had to forego taking certain medications, as she cannot afford them. Francine feels that she cannot meet the educational needs of her children and does not have enough money to buy them clothes.

Francine lives relatively close to the nearest health centre, and the last time she visited she was able to walk there in less than 30 minutes. After a brief five-minute wait, her consultation lasted for about an hour. Given her difficult financial conditions, Francine did not have to pay out of her own pocket for the services, and instead received financial assistance from the church.

As a member of a support group for persons living with HIV, Francine meets once a month with her group members. She has formed a strong bond with the group, and strongly believes that being part of such a group has helped her cope with the illness. Many of the group members have other family members with HIV, just like Francine. Francine is aware that one can contract HIV through sex without a condom, and that mothers can transmit the illness to their newborns. However, she does not believe that one can get the virus through donating blood, getting an injection from a doctor, or sharing needles.

Francine's story illustrates the devastating toll of HIV on people's lives in Rwanda. Though she was formerly able to work and provide for her family, she is now faced with numerous challenges as a result of contracting the virus. Another member of her family has also contracted HIV, so the physical health of her entire family is now threatened. She can no longer work to earn wages and is unable to pay for meals, clothing and decent housing for her family. Consequently, the family is forced to rely on the generosity of the community to survive. If Francine and her family were members of a community-based payment scheme, the financial burden of the illness might be somewhat lessened, as illustrated in Chapter 2.

### **Lessons learned**

### **NHA** application

NHA analysis is a useful tool that can provide information for monitoring and evaluating the various components of the health system, including spending and financing for HIV/AIDS-related services. Providing data on HIV/AIDS resources flowing through the health system, NHA data can help the Ministry of Health adjust health policies. The NHA framework could be applied on a systematic basis in order to track and monitor resource flows, providing insight into the effects of various policy changes on HIV-positive individuals

One can expect that there will be significant donor support for the application of the NHA methodology in various countries in the future, given the crucial financial information it provides on the flow of resources within the health system. Replication of the HIV/AIDS component of NHA that was developed and implemented in Rwanda could be added to the future application of the overall NHA methodology, using the research tools already designed and tested in Rwanda.

Through application of the exercise in Rwanda, important lessons were learned in terms of the data collection process, offering direction for future replication:

 Reliable data and information systems are crucial. A pressing need for data and information systems exists in almost all developing countries. Availability of reliable, valid, high-quality financial data is at the core of the NHA exercise and any evidence-based decision-making process. Data management and tracking systems that facilitate the monitoring of the flow of health funds from one entity to another should be instituted. Implementing effective financial management systems is the first step.

- 2. Conventional accounting systems need improvement. Often, developing countries need to upgrade their accounting systems. Conventional accounting and budget systems with standardized definitions need to be developed at the national level.
- Capacity among developing-country nation-3. als must be built to effectively deal with new management systems information analyse resulting data. Upgrading and implementing sophisticated accounting and financial management information systems gives rise to a need for trained personnel to institute and maintain data systems, and develop and maintain databases. To fulfill such a need. training programmes for the personnel should be designed and coordinated. Local capacity should also be built for data analysis and the translation of the quantitative findings into a policy context—in other words, interpretation of the results for policy action.
- 4. NHA should be institutionalized. Tracking resource flows within a specific subsector, such as HIV, relies extensively on the basic NHA framework. To facilitate the develop-

- ment of such subsector-specific accounts, it is important that the overall NHA analysis be conducted regularly.
- 5. Coordination with donors should be improved. There is a need for a system to coordinate and track donor contributions more effectively. One of the greatest difficulties faced during the data collection process for this study was estimating donor funding. The NHA exercise could be greatly facilitated with some coordination by the MOH that tracks the donor amounts and the activities they finance.

#### **NHA** policy implications

The NHA analysis has policy implications for effectiveness, equity, efficiency and sustainability in financing HIV/AIDS services in Rwanda

#### **Effectiveness**

One of the Ministry of Health's objectives has been to prioritize HIV/AIDS prevention and service provision, given the growing financial burden caused by the disease among the Rwandan population. The NHA analysis shows, however, that the current financing system is not effective in lessening the economic burden of treatment on HIV patients.

While the Rwandan Government and donors are spending the majority of HIV-specific funds on prevention activities, the greatest economic burden of HIV is in the area of treatment of HIV and related symptoms. The pandemic has farreaching effects on families, the workplace, schools and other aspects of society, thereby impacting even those who are not directly infected with the virus. A broader approach is needed to curb the financial impacts of the pandemic on society – specifically the poor – as well as to prevent further infection. This approach might include helping to develop prepaid health-care-financing schemes that cover basic care for HIV patients as well as enrolment fees for the poor in order to increase equity in health care financing (see Chapter 2).

#### **Equity**

The implication of the NHA analysis for equity in access to care is clear: access to HIV services depends upon ability to pay. The data demonstrate that patients in higher-income brackets receive more extensive treatment, and have access to more advanced technologies, than do low-income patients, who receive minimal care. Policies enhancing accessibility to care for all citizens, including those who live in remote areas and those who are in lower-income groups, are needed. These policies should ensure that similar types of treatment are provided to all patients, regardless of income, in order to narrow the gap between those who can access such care and those who cannot.

Covering HIV care through more diverse financing sources, such as increased and targeted government and donor resources, as well as community-based payment schemes, might be an improvement. With more mixed financing sources, the economic burden of treatment would be shared by a greater number of people.

#### **Efficiency**

The question of efficiency within the context of health system financing is important as various needs compete for

limited resources. Within the subsector of HIV/AIDS, prevention and education programmes are highly valued services because they avert disease and can curb the high costs of treating HIV patients. In Rwanda, the allocation of resources towards prevention activities, such as information, education and communication programmes, should be targeted and increased, thereby preventing the spread of the pandemic and curtailing the heavy financial burden of treatment costs in the future. It would also be desirable to determine which preventive interventions are most cost-effective in containing the impacts of HIV/AIDS so that allocations to these activities can be increased.

An efficient health care system would also provide the greatest possible number of treatment services to HIV patients. Currently, there are insufficient data to evaluate the economic efficiency of the provision of HIV treatment in Rwanda. However, a cost-accounting system that could capture the costs of programme-specific activities could help determine how efficient and cost-effective service delivery is, and how to improve it.

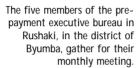
In the case of a complex financing system involving multiple financing sources (such as the government, donors, private households, community groups and others), coordination among the various actors becomes critical for efficiency, among other things. Good coordination is necessary to ensure that resources from each source are allocated in the most efficient manner to the most highly valued activities.

#### Sustainability

One of the major challenges to the current system of HIV financing in Rwanda is sustainability. Excessive dependence on donors or households is not sustainable in the long run.

Not only is it inequitable for already poor patients to bear the brunt of the financial burden, it is also unsustainable for families themselves to cover such a large portion of treatment costs. Similarly, the Ministry of Health cannot rely exclusively on donor funds in the long term, although donor payments targeted to improve low-income individuals' financial accessibility to basic care might help in the short term. Community-based prepayment schemes are one method of improving accessibility that the Rwandan Ministry of Health has already begun to explore. Chapter 2 discusses in greater depth prepayment schemes as a way to improve access to high-quality health services for the poor, while also improving financial management in health facilities and increasing community participation.

In addition to funding for prevention, the challenge of meeting the current costs of treating HIV-related symptoms must also be confronted. With the information gathered from the NHA analysis, policy-makers, international organizations, and community groups in Rwanda can now explore alternative ways to pay for HIV services.





## Chapter 2

How to improve financial accessibility for the seropositive poor: lessons from community-based health insurance schemes in Rwanda

#### Introduction

As the NHA analysis highlights, individuals in need of health care services in Rwanda pay out-of-pocket user fees each time they seek care. This practice has posed a serious problem for the poor in Rwanda, who are mainly subsistence farmers receiving cash income on a seasonal basis only. User fees can cause patients to be partially, temporarily, seasonally or permanently excluded from services. This is a situation in which poor HIV-infected individuals find themselves more often than the general population, as they more frequently need health care to treat their fragile health. Lacking sufficient resources to pay for basic services and drugs, poor patients are the group most likely to be temporarily excluded from care, and sent away by providers to raise the necessary funds. This results in delayed treatment. During the year, poor patients face seasonal exclusion from care when their access is limited to the 'cash season'-the time when a rural population sells its harvest—and excluded from treatment during the 'non-cash season'. In addition, seropositive and other poor patients bear the risk of partial exclusion from services if they lack the full payment amount required by the health centre and, as a result, they may not receive all services or drugs prescribed by providers.

Growing concern over rising poverty, the effect of user fees for health care, and a sharp drop in demand for basic health services<sup>4</sup> motivated the Rwandan Government to seek innovative ways of improving financial accessibility to good-quality health care. Pilot-testing of a prepayment plan was undertaken as an alternative to the predominant out-of-pocket user fee system.

Prepayment plans are a form of health insurance that protects enrolled members against the financial consequences of their need for health care services. Prepayment plans are formed by individuals who join individually or in groups, and make an annual prepayment in return for health care services, when required. As a result, the risk of health care cost is spread over the entire membership pool, constituted by both the healthy and the sick—including HIV-positive individuals and those with varying income levels. Compared to the user fee system, insured patients face less uncertainty about how much they pay at the health centre when in need of care. As a result, it was expected that, in settings such as Rwanda, prepayment might help remove financial barriers to using the health services when required.

With technical assistance and financial support from the Partnerships for Health Reform (PHR) project, funded by USAID and administered by Abt Associates, the Ministry of

Demand for basic health services fell from 0.3 in 1997 to 0.25 curative visits per capita per year in 1999.

Health launched prepayment pilot schemes in three districts in 1999 to evaluate prepayment in a limited area before offering it on a larger scale. To the initial four main objectives of the programme, three more were added during the pilot phase. These seven objectives are:

- 1. improved financial accessibility to health care;
- 2. improved quality of care;
- 3. improved community participation;
- 4. improved financial sustainability in health facilities and prepayment funds;
- reinforced democratic governance in the health sector:
- 6. capacity built in financial management; and
- 7. strengthened social fabric in Rwandan society.

This chapter summarizes the first-year results attained by the implementation of prepayment schemes (PPS) in Rwanda and the extent to which they have achieved Ministry objectives. Details of lessons learned on how to improve financial accessibility to basic health care and recommendations on strengthening the current prepayment plans follow. The groundwork laid by the pilot PPS has prepared the Rwandan health sector for a scale-up, improving financial accessibility to basic care on a broader scale for the poor, including HIV-positive individuals.

# Development and implementation process

The Ministry of Health decided to pilot-test prepayment schemes before undertaking larger-scale implementation, and selected three experimental districts for testing (Kabgayi, Byumba and Kabutare) and two control districts for comparison (Kibungo, Bugesera). Selection criteria for pilot districts were as follows: sufficient health infrastructure: the population's repeated demand for technical assistance in developing and implementing prepayment schemes; and the districts' political will to participate in the pilot scheme. The design, development and implementation of prepayment schemes in Rwanda took place in a participatory manner, with ongoing dialogue between the Ministry of Health and the rural population. The Ministry of Health formed a strategic steering committee, including government and civil society representatives from the central and regional levels, to coordinate the PPS activities. In addition to this central-level committee, community and health care representatives met at a large number of district workshops and a series of community gatherings to agree upon PPS organizational and management features. Proposals stemming from these pilot district workshops were shared with the central steering committee, which then provided feedback and advice. As a result of these meetings and workshops, legal, contractual and financial tools were developed and participants were trained to manage 54 prepayment schemes.

Enrolment in prepayment plans is open all year round to anyone living in the three rural districts, which allows the population—including HIV-positive individuals—to sign up whenever they have cash available to pay the annual enrolment fee. Members enrol with the prepayment scheme affiliated with their preferred health centre. The benefit package

for PPS members in each district is summarized in Table 3. By paying an annual premium of FRw2500 francs (US\$7.50) per family, members are entitled, after a one-month waiting period, to a basic health care package covering all services and drugs provided in their preferred health centre, ambulance transfer to the district hospital, and a limited package at the district hospital<sup>5</sup>. Membership also entitles all those enrolled to participate actively in the schemes' democratic management.

Due to the more comprehensive hospital package in Kabgayi, its annual premium is slightly more expensive (FRw2600 per family) compared to that of Kabutare and Byumba. Members then pay a co-payment of FRw100 (US\$0.30) for each health centre visit. Hospital services are covered for PPS members only if referred by their 'preferred provider' health centre, which members contact first in the event of sickness, and which play a gatekeeper function to discourage inappropriate use of hospital facilities.

Premium rates were set by taking into account existing user fees and by assuming that utilization rates would increase by 25% compared to baseline levels. See Schneider et al. (2000) Development and Implementation of Prepayment Schemes in Rwanda. Technical Report No. 45. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc. Chapter 3.1.1.

Table 3. Prepayment schemes: health centre and hospital benefit packages and premiums

Package	Kabutare	Byumba	Kabgayi
Health Centre	All services covered (capitation payment):     Preventive and basic curative care by nurses     Drugs on essential drug list of MOH     Hospitalization at health centre     Ambulance transfer to district hospital	Same as Kabutare	Same as Kabutare
District Hospital	Covered with health centre referral: Consultation with physician (fee-for-service payment) Overnight stay (fee-for-service) Caesarean section (per episode)	Same as Kabutare	Covered with health centre referral, full treatment per episode (perepisode payment):  Caesarean section Paediatric cases (<5 years) Malaria (>5 years)
Annual premium by enrolment category <sup>6</sup>	Individual: FRw2000 Household: FRw2500 up to 7 individuals; if 8+ persons: FRw530 for each additional person Groups (with 8+ people): FRw530 per person	Same as Kabutare	Individual: FRw2200. Household: FRw2600 up to 7 individuals; if 8+ persons: FRw550 for each additional person Groups (with 8+ people): FRw550 per person

#### Organization

According to Rwandan law, the schemes are considered mutual health associations. Each prepayment plan maintains a contract with the local health centre and is managed by an executive bureau of five member volunteers, who are elected by scheme members during a general assembly. Both Rwandan law and the schemes' by-laws require that members be invited to attend the prepayment scheme general assembly at least once a year.

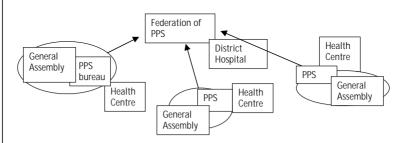
At the district level, all the executive bureaux of the prepayment schemes assemble to elect their Federation of Prepayment Schemes—a group of five members representing the prepayment schemes in that district. The federation works

The enrolment category 'group' is formed by any group of eight or more individuals, including schools, cooperatives, women's associations, orphanages, families with eight or more members, groups of adolescents who do not fall under the household category, etc.

in partnership with the district hospital, the health district and other health authorities. Figure 3 illustrates this relationship.

Figure 3.

Organization of prepayment schemes at the district level



### Provider payment method

The Ministry of Health preferred a provider payment method that would offer incentives to providers, insurers and members to control moral hazard, the frivolous use of health services and the oversupply of services, which can result in cost escalation. Various provider payment systems were considered. Capitation payment with a quality component for health centres was chosen by workshop participants and steering committee members. Under capitation payment, the prepayment scheme reimburses health centres a part of the insurance fund, based on the number of insured members on a monthly basis. Capitation payment offers incentives to health centres to increase the provision of preventive care services to keep members healthy and to improve quality of care in order to attract more members to the partnering insurance pool. However, capitation payment in Rwanda is not risk-adjusted for high-cost members, and shifts the financial risk caused by higher service use by sicker members, such as HIV-positive individuals, to health centres, which autonomously manage the use of their financial sources. The 54 health centres that offered prepayment as an option are aware of the financial risk of accepting the sickest into their membership pool. They managed this risk by enlarging the pool, adding more healthy members to share the risk. Per-episode and fee-for-service payments were selected to reimburse the district hospital for the limited benefit package.

# HIV-positive individuals who are members of prepayment schemes

Although it has been estimated that 11% of Rwanda's population is seropositive, results from sentinel surveys in prenatal clinics suggest that the proportion of infected adults is higher <sup>7</sup>. There are few health centres in Rwanda that offer HIV testing, for which patients are charged user fees. Therefore, it is not surprising that poor people prefer to remain ignorant about their HIV status, as they must choose between food, housing and medical care when determining spending priorities. Instead of getting tested, the poor often assume they are infected with the virus because they are sick more often, or experience the same symptoms of a partner who has passed away. Thus, the proportion of the rural poor with HIV and the number that have become prepayment members is difficult to determine.

In general, health insurance schemes face two difficulties: first, adverse selection (the sicker have a greater interest in enrolling), and second, moral hazard (members tend to over-use care). Adverse selection becomes of particular concern when a large proportion of the population has HIV. Despite having a relatively high proportion of HIV-positive

<sup>7</sup> HIV prevalence among pregnant women was estimated to be 25%.

individuals among the prepayment members, the insurer can maintain financial sustainability in the risk-sharing pool. This can be done by adding a large number of healthy members who will share the risk with those who use care more often, and by limiting the benefit package to basic care provided in health centres and district hospitals. where the rural population usually seeks care. The benefit to HIV-positive members, in the form of health services covered by the insurance, will be higher than the enrolment fee they pay, and it is therefore more likely they will become members of prepayment plans, particularly if there is an open enrolment policy. The first chapter of this report presented the dire socioeconomic situation of HIV-positive individuals interviewed in a household survey. Of the 350 seropositive people interviewed, 25% said there was at least one additional person living in their household who was infected with the virus. Clearly, these families would have a greater interest in enrolling in the prepayment scheme in their community and paying the FRw2500 annual enrolment fee that allows access to a benefit package for the entire family.

Though the precise prevalence of HIV among prepayment members is not known, it is assumed to be higher than the prevalence reported for the total population. Several prepayment plans and their affiliated health centres in the three districts have accepted individuals known to be seropositive. Among them is the health centre of Matyazo, where a church group paid the enrolment fee for 50 individuals, all of whom were members of an AIDS association. They cannot be stigmatized by the insurer or the community as their HIV status is kept a medical secret, and their membership card is identical to those of all other members. Prepayment membership entitles them to the same benefit package as that of other insured members (see Table 3), and

ensures that they both receive care and are treated with dignity. Prepayment membership is particularly important for sick individuals who are also poor and may lack the resources to pay for basic painkillers, or could be forced to leave the household as their health needs become too expensive for the family's constrained budget.

### **Evaluating prepayment**

In order to evaluate the extent to which prepayment schemes have achieved Ministry of Health objectives, a quasi-experimental design involving data collection on several levels was employed. Routine monthly data were collected in all health facilities in both pilot and control districts, documenting service utilization, cost and finances during the prior year and during implementation of prepayment. Each prepayment bureau submitted monthly membership, cost and finance data during the pilot year. Additional information was collected in two focus group surveys: one patient-exit interview survey, and one household survey documenting households' and individuals' sociodemographic and economic characteristics, their prepayment participation pattern, and demand for curative and preventive care services. The impact of prepayment is evaluated by comparing health facility performance and the demand for health services among members and non-members in the pilot and control districts the year before and since the introduction of prepayment.

## Synthesis of results

The following summarizes the evaluation findings in terms of the Ministry of Health's objectives for the prepayment pilot scheme.

#### Objective 1:

Improved financial accessibility to health care

Three criteria were used to evaluate the extent to which the prepayment schemes improved financial accessibility to health care for members, compared to non-members: (1) the use of health services; (2) receipt of drugs prescribed for the patient's condition (extent of partial financial exclusion); and (3) households' ability to pay the annual contribution to prepayment schemes.

Findings revealed that the overall use of curative services for adults and children, and preventive health services for children and women, was up to five times higher for members than for non-members, at an average of one curative care consultation per year8. However, members' rates of use are still too low to judge them as having reached a level of frivolous use. Members' higher service utilization of an average of 1.1 consultation per capita per year reflects a level of use more in line with that expected, given the population's epidemiological profile. Capitation provider payment may have controlled over-utilization and over-provision of care, thus preventing the frivolous use of health care services. High adverse selection does not seem to have been the cause of higher service utilization, as only 13% of male and 6% of female members interviewed said they enrolled because of chronic illness. Seropositive members with

B District averages are 1.5 curative consultations per member per year in Kabutare and Kabgayi, and 1.1 curative consultations per member in Byumba, whereas non-members' use averages 0.2 consultations per non-member per year.

greater need for services benefited from improved access to basic health care services and drugs provided in health centres.

When patients lack the funds for payment, there can be a problem of exclusion from services, but this was not observed for PPS member patients. Patient-exit interviews showed that members had access to the entire treatment prescribed, whereas non-member patients were, in fact, excluded to a certain extent from health care, with 20% lacking the necessary funds to buy the drugs prescribed during their health centre visit. Non-members' incomplete drug consumption may lead to quality concerns, particularly if patients develop resistance to antibiotic or antimalaria drugs due to incomplete treatment, or if seropositive patients needing medication do not receive it.

Non-member patients pay up to 12 times more per health centre visit than members, according to patient-exit interviews. Prepayment schemes aim to improve financial accessibility to care for the poor by allowing members to join when they have cash available and pay very little when health care services are needed. The vast majority of members interviewed (70% of males and 85% of females) believe that prepayment is less expensive than paying out of pocket, that it provides an opportunity to invest money, and that it guarantees access to care when needed.

However, the poorest households may not be able to afford the annual enrolment fee. The household survey conducted in the five districts showed that although the majority of prepayment members are poor, prepayment fees are a financial burden for the poorest households. The prepayment membership premium represents 20% of annual monetary expenditure for the poorest households, compared with 4-5% for the average household. The importance of

prepayment membership for the poorest has been recognized by church groups and other members; it has caused prepayment to become a promising tool for subsidizing enrolment fees in a targeted and non-stigmatizing manner for indigents, orphans and poor seropositive individuals, enabling them to retain their dignity while seeking care.

#### Objective 2: Improved quality of care

Any improvement in the quality of care was evaluated based on the availability of resources, the continuity of preventive service use, and patients' satisfaction with care. Members and non-members interviewed in the patient-exit survey were equally satisfied with providers' behaviour and reception. Member patients interviewed in the three pilot districts were more likely to be informed about their diagnoses (20-40%) compared with non-member patients in control districts (14%). Findings from the focus group survey reveal that members are more demanding than non-members, and more demanding patients organized in consumer groups with purchasing power generally set higher standards in the provision of care, contributing to improved health service quality.

Prepayment schemes have influenced the availability of drugs and trained personnel by increasing demand for good-quality care through more informed consumers. As mutual health associations, PPS hold regular general assembly meetings at which members and health centre representatives discuss issues related to the health centre, the scheme, or personnel behaviour. Consequently, several health centres improved their technical staff structure, which, in turn, affected the prepayment enrolment rates, health centres' utilization level and the quality of care provided.

Capitation payment to health centres, which is calculated according to the number of members enrolled in the prepayment pool, provides an incentive to providers to increase the number of PPS members, and keep them healthy with more preventive services. Household survey data revealed that female members were considerably more likely to have one to three prenatal care visits and seek professional assistance during delivery than non-members.



Rwandan farmer.

Objective 3: Improved community participation in the health sector

Community participation was evaluated based on the population's enrolment in the schemes, the mobilization of financial resources for the health sector, and members' participation in the schemes' management.

The proportion of the district population enrolled in prepayment schemes serves to measure the schemes' acceptability to the population. At the end of the first year, the 54 prepayment schemes had 88 303 members overall, with an average enrolment of 1635 members per scheme, which corresponds to an average participation rate of 8% of the target population. Enrolment rates were spread widely across the 54 schemes, ranging from 0.9% to 55% of the enrolled population living in the health centres' catchment area.

Based on the overall prevalence rate, it can be estimated that at least 10 000 of these prepayment members are HIV-positive.

Prepayment schemes aim to improve access to care and, at the same time, secure sustainability in health facilities through the continuous financial participation of the community. With growing membership pools, prepayment contributions to health facilities have become more important. During the first year, prepayment schemes contributed an amount equal to funding from government and donors combined, in health centres where more than 20% of the catchment-area population was enrolled. On a per capita basis, prepayment scheme members contribute up to five times more to health centres than do non-members.

All schemes convened all members for an average of three general assemblies per year to discuss issues related to health care and scheme management. This democratic management style offers the population, including HIV-positive individuals, an opportunity to actively participate in decision-making related to their own health care needs. The general assemblies can also be used to teach the rural population about HIV and preventive measures to avoid infection.

Objective 4: Improved financial sustainability in health facilities and prepayment schemes

Improved financial sustainability was measured by health centres' recovery of total operational costs from prepayment and user fee revenue, as well as by their use of limited resources. Also examined were the financial viability of prepayment schemes and their use of financial and administrative management tools.

Total cost recovery rates in health facilities were calculated for member and non-member patients' total operational costs. Members' cost recovery rates are higher than nonmembers' in health centres with sufficiently large membership pools and in those that are operating at efficient cost levels. Members' higher cost recovery rates had a direct effect on health centres' overall cost recovery rates in the district of Byumba, where more than 10% of the district population had enrolled in the 20 schemes. Total cost recovery rates for all patients in Byumba health centres had increased from 68%, during the year before prepayment, to 75% during the pilot year. Higher cost recovery ratios are most evident in health centres with previously low utilization levels that have managed to partner with large PPS membership pools. However, health centres with proportionally large numbers of seropositive individuals among their prepayment members might face an increased financial risk and lower cost-recovery rates, mainly because those with HIV use the health care services more often.

Use of limited resources was measured primarily by calculating members' and non-members' unit costs for drugs. Patients who seek care at the onset of illness need fewer drugs to recover, and capitation reduces a provider's incentive to over-prescribe medications. Detailed cost analysis showed that non-members reported up to 20% higher drug unit costs per visit than did members.

At the end of every month, each prepayment scheme pays a capitation payment to the partnering health centre and a fixed amount to the district PPS federation, which reimburses the district hospital with a per-episode payment for covered services. Of the schemes' total annual expenditures, 7% was used to cover their own administrative costs, 7% was used for hospital care and 86% went towards curative

and preventive care and essential drugs in health centres. Prepayment schemes also received financial support in the form of targeted demand-side subsidies, such as in Kabutare, where churches paid the annual enrolment fees of 3000 widows and orphans, and of 40 HIV-positive individuals who are members of AIDS associations.

Additional management tools were developed and introduced in prepayment schemes and affiliated health facilities. All prepayment schemes and health facilities work with these tools on a daily and monthly basis in order to calculate monthly payments.

Objective 5: Improved democratic governance in health sector

Prepayment schemes have contributed to democratic decision-making in the health sector by introducing prepayment general assemblies, inclusive of all members, as a discussion and election forum. By using legal tools such as bylaws and contracts between payers and providers as a framework for governance, and by bringing health issues, including HIV/AIDS, to the political agenda during Rwanda's first elections of mayors for communities, the role of PPS in Rwanda has very likely increased democratic governance within and outside the health sector.

Objective 6:

Capacity built in financial management

Prepayment schemes are managed by their members. However, the rural community members who enrol in the

<sup>9</sup> PHR Technical Report No. 45, "Development and Implementation of Prepayment Schemes in Rwanda" describes these tools in detail.

schemes are mainly subsistence farmers, and the majority of them are illiterate. They have hardly any experience with insurance or other solidarity forms. Thus, administrative and financial management capacity had to be built in order to have about 300 PPS members capable of managing their schemes. Human capacity was built at the central, district and community levels. Training included health care financing, insurance, provider payment, incentive systems, administrative and financial management and organization of micro-financing systems, plus the implementation of a contract and legal framework. These topics were new to the rural population. Scheme managers attended a series of district workshops during the pilot phase, whereby they received continuous, in-depth training on insurance and financial management. Similarly, strategic capacity was built in the MOH at the central and peripheral levels to guide the launch and follow-up of prepayment schemes.

Objective 7: Strengthened social and civic fabric in Rwandan society

The trust, cohesion and solidarity mechanisms upon which prepayment schemes are dependent are part of the social capital that was damaged during the civil war and genocide in 1994. Such mechanisms are particularly important in a society with a growing HIV prevalence. Prepayment plans can serve as organizations that can strengthen social cohesion and networking. They also provide the means for identifying the most vulnerable society members, such as seropositive individuals, and support them in a targeted manner.

# Lessons learned

#### **Effectiveness**

A health care system that offers HIV prevention and basic drugs is not effective when more than 80% of the rural population is excluded due to financial barriers. These barriers have been lifted for the members of the pilot prepayment plans in Rwanda, among them at least 10000 rural poor who are likely to be HIV-positive. Prepayment schemes have helped achieve the Ministry of Health objectives of improving financial accessibility to better-quality care for the rural poor, improving financial sustainability in health facilities. and strengthening the active participation of the community in health care financing activities. First-year results summarized in this report show that prepayment schemes have the power to bring the use of health services more in line with the needs of the rural poor, promote community participation, improve financial viability and provide a mechanism that helps target the most vulnerable, including seropositive individuals.

The PPS experience in Rwanda has shown that equity in financial accessibility to better-quality care can be improved in low-income countries with carefully designed health insurance schemes. Important characteristics of the Rwandan PPS that seem to have contributed to their success include the following: they are open to all individuals and they set necessary incentives to providers, insurers and consumers to manage health service utilization and health care cost. In addition, PPS can act as a mechanism for the government and donors to subsidize care for the poorest members of society, among them HIV-positive individuals. Positive incentives could be offered to health centres that take addi-

tional financial risks by accepting seropositive members in their prepayment pool. For example, public and international funds could be used to ease providers' financial risk by subsidizing prepayment enrolment fees at a higher price for families with seropositive individuals, and by donating specific drugs, such as antibiotics, to health centres. To avoid concentrated financial risk in only a few health centres, AIDS associations could spread their members' enrolment over several prepayment plans.

#### **Ethical soundness**

Prepayment schemes are created and managed by their members and function as a result of solidarity among the healthy and the sick, or those with and without HIV. Such solidarity is challenging in a society struggling to rebuild social cohesion and social capital, such as trust, compassion and responsibility for the needy, after being devastated by a civil war and genocide in 1994. As the insurance plans were designed with the participation of the rural population, community involvement and consensus have ensured the appropriateness of the schemes for the community. In addition, the plans are implemented and democratically managed by their members, bolstering community participation and empowering consumers. Human capacity was built into health care financing and insurance issues in the rural communities to ensure that the schemes had locally accountable administrative and financial management.

#### Relevance

As illustrated by the high health expenditure found in the household survey (Chapter 1), prepayment scheme membership can reduce the impact of HIV on the socioeconomic situation and health of a household with seropositive individuals.

The schemes expand existing care and support activities to those who were previously excluded due to financial constraints. When sick, seropositive prepayment members have access to basic health care in health centres, ambulance transport to the hospital and a defined hospital package of services. Each of the many episodes of illness will cost an enrolled family only a minimal co-payment, while payment for treatment might cost twenty times more per episode, especially if a patient is HIV-positive. Also, as the prepayment schemes were designed by the community and the MOH, local culture, priorities and tradition helped ensure relevance to each community's health needs.

# Equity within the HIV-positive population

Two questions remain to be addressed by the government and organizations working with seropositive individuals in health care. Firstly, although poor individuals with HIV spend only a fraction of what the richest pay, the poor pay more as a proportion of total household income and receive considerably less. In addition, the rich benefit more from government subsidies, as they are more likely to seek care in central hospitals, whereas most poor individuals seek care in health centres, which receive less public funding.

Secondly, household survey data revealed that annual enrolment fees place a heavy financial burden on the poorest of the rural poor. To improve equity between the richer and poorer groups within the 'rural poor,' government and donors could subsidize the annual enrolment fee of the poorest and most vulnerable groups (such as the poor with HIV), through the mechanism of the prepayment schemes, and without stigmatizing them. This would allow them access to better-quality care, and to a community support

system that strengthens solidarity, responsibility and compassion between the healthy and the sick.

# Concluding remarks

The NHA methodology applied specifically to HIV services in Rwanda offered crucial information on the sources of financing of HIV services and insights into utilization and payment for HIV-related care. The government provides very little funding specifically for AIDS treatment, and donors only provide resources for prevention activities. Therefore, the economic burden of treatment costs falls almost exclusively on HIV patients, who must then rely on their own income, financial assistance and/or borrowing. The NHA analysis points to the need to develop alternative financing policies that will increase equity in access to treatment, decrease the economic burden on households, and focus HIV-related spending on cost-effective activities.

One alternative financing mechanism in Rwanda—community-based prepayment schemes—has shown marked progress towards reaching the goals of greater financial access to basic services, financial sustainability of health centres, community participation and democratic governance. With the policy of open enrolment, HIV-positive individuals have also gained greater access to basic health care services, and have been able to participate in health service decision-making within their own health centres. Prepayment schemes can be used as a mechanism to subsidize treatment of HIV/AIDS-related symptoms, as donors, the government and church groups can cover the basic enrolment fee of the seropositive poor. However, it is important that the risk of illness associated with HIV-positive individuals be spread over various health

centres, so that the financial burden is not concentrated in only a few.

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The Joint United Nations Programme on HIV/AIDS (UNAIDS) is the leading advocate for global action on HIV/AIDS. It brings together seven UN agencies in a common effort to fight the epidemic: the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations International Drug Control Programme (UNDCP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the World Bank.

UNAIDS both mobilizes the responses to the epidemic of its seven cosponsoring organizations and supplements these efforts with special initiatives. Its purpose is to lead and assist an expansion of the international response to HIV on all fronts: medical, public health, social, economic, cultural, political and human rights. UNAIDS works with a broad range of partners—governmental and NGO, business, scientific and lay—to share knowledge, skills and best practice across boundaries.

This Case Study focuses on the development and implementation of prepayment insurance schemes for HIV/AIDS-related health care services in Rwanda. Based on an analysis of National Health Accounts, and developed by the Rwandan Government, the system was introduced to ensure that the growing numbers of rural poor had access to modern health care facilities. The study examines the proportion of health-related expenditures by government, donors and patients on the prevention and treatment of HIV/AIDS, detailing the impact on households, and suggesting ways to decrease the financial burden of HIV on the seropositive poor. Issues of effectiveness, ethical soundness, relevance and equity within the HIV-positive population are also explored.



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